

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,298	04/02/2001	Jochen Kappel	51207-1030	4066

22827 7590 08/23/2004

DORITY & MANNING, P.A.
POST OFFICE BOX 1449
GREENVILLE, SC 29602-1449

EXAMINER

LAO, SUE X

ART UNIT PAPER NUMBER

2126

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/825,298

Applicant(s)

KAPPEL ET AL.

Examiner

S. Lao

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending. This action is in response to the amendment filed 4/29/2004. Applicant has amended claims 1, 5, 6, 10, 11, 13 and 15.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 2, 6, 7, 11, 12, 16 and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by Beard (U S Pat. 5,911,069).

As to claim 1, Beard teaches a system for providing exception handling for a computer program (object-oriented program), comprising:

 - means for establishing (define exception classes) a plurality of exception types (corresponding to types of exceptions);
 - means for capturing an exception (detect exception);
 - means for providing an exception notice for the exception (throw a recognizable exception). See col. 9, lines 11-48.

As to claim 2, Beard teaches means for determining the exception type (identify corresponding class, col. 9, lines 39-46).

As to claims 6 and 7, these are the method claims of claims 1 and 2, respectively, thus note claims 1 and 2 respectively for discussions.

As to claims 11 and 12, these are the program product claims of claims 1 and 2, respectively, thus note claims 1 and 2 respectively for discussions.

As to claim 16, note discussion of claim 1, and the equivalence of class creator / means for establishing, exception capture mechanism / means for capturing, and exception notice generator / means for providing an exception notice.

As to claim 17, note discussion of claim 2, and the equivalence of exception determination mechanism / means for determining.

Art Unit: 2126

4. Claims 3, 5, 8, 10, 13, 15, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beard as applied to claims 1, 6, 11, 16 in view of Forson (U S Pat. 4,481,577)

As to claim 3, Beard does not teach using an exception dictionary.

Forson teaches a system for providing exception handling for a computer program, including means for using an exception dictionary (indexed file, dictionary set of definitions) to determine an exception type (col. 4, lines 59-64; appendix; col. 13, line 56 - col. 14, line 2). Therefore, it would have been obvious to use an exception dictionary to determine the exception type in Beard. One of ordinary skill in the art would have been motivated to combine the teachings of Beard and Forson because this would have allowed customization of exception notice without the availability of the source code (col. 1, lines 27-40).

As to claim 5, Forson teaches means for propagating the exception to a central place if the exception type is not a validation exception (handle individual users errors message by a single editor program 107, col. 2, lines 54-64). Given the teaching of Benson, it would have been obvious to include means for propagating into Beard. Note discussion of claim 3 for a motivation to combine.

As to claims 8 and 10, these are the method claims of claims 3 and 5 respectively, and thus note claims 3 and 5 for discussions.

As to claims 13 and 15, these are the program product claims of claims 3 and 5 respectively, and thus note claims 3 and 5 for discussions.

As to claims 18 and 20, note claims 3 and 5 for discussions, and the equivalence of processing mechanism / means for propagating.

5. Claims 4, 9, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beard as applied to claims 1, 6, 11, 16 in view of Benson et al (U S Pat. 5,761,407).

As to claim 4, Benson teaches means for continuing processing (clear the trap and return control) (non-terminating model handling, col. 7, line 62 - col. 9, line 42) of the computer program if the exception type is a validation exception (exception cause

Art Unit: 2126

being nil which indicates a valid exception for prog_B, col. 9, lines 29-43). Given the teaching of Benson, it would have been obvious to include means for continuing processing into Beard. One of ordinary skill in the art would have been motivated to combine the teachings of Beard and Benson because this would have prevented dead routines from cluttering system memories (col. 4, lines 21-29).

As to claim 9, this is the method claim of claim 4, thus note claim 4 for discussion.

As to claim 14, this is the program product claim of claim 4, thus note claim 4 for discussion.

As to claim 19, note the discussion of claim 4, and the equivalence of processing mechanism / means for continuing processing.

6. Applicant's arguments filed 4/29/2004 have been fully considered but they are not persuasive.

Applicant argued that the features and steps in Beard are only used for a particular type of method (SOM method) and not for an entire computer program which may often include many different methods and possible types thereof. As such, Beard does not disclose features for providing exception handling for a broad realm of computer programs as set forth in original claims 1 and 16. (remarks, page 8, 1st and 4th paragraphs, page 9, 2nd paragraph).

The examiner respectfully disagrees. First, the argued providing exception handling "for an entire computer program which may often include many different methods and possible types thereof" and "a broad realm of computer programs" are not claimed. See claims 1 and 16. In fact, claims 1 and 16 require capturing an exception and providing an exception notice for the exception, which clearly does not specify which or how many methods or types the exception and the notification are directed to, nor the scope of the exception in relation to the computer program, nor the number or the types of the computer programs. Second, the language of claims 1 and 16 does not exclude the method type being a SOM method, thus does not exclude the application of Beard. In addition, Beard teaches the methods include SOM methods, as well as other

Art Unit: 2126

methods with similar functionalities, Col. 9, lines 26-28. Third, the plurality of exception types as recited in claims 1 and 16 are met by the exception classes in Beard which correspond to respective types of exceptions. Col. 9, lines 11-48.

Regarding claim 5, applicant argued that Beard and Forson fail to disclose identifying validation exceptions, and the editor program is not utilized for propagating exceptions to a central place upon identification as a validation exception. (Remarks, paragraph bridging pages 9 and 10).

The examiner's response is as follows. The argued "identifying validation exceptions" and "upon identification as a validation exception" are not claimed. Instead, claim 5 requires propagating the exception to a central place if the exception type is not a validation exception. The claimed 'central place' is met by the single editor program because this is the location wherein error messages of each of the local/individual users are handled. In other words, central is in contrast to the situation wherein each user handles its own local error messages. The claimed 'if the exception type is not a validation exception' is met by the error messages at the individual users because such errors are of the type indicating that a command is unable to execute (col. 3, lines 57-66), which clearly is not a validation exception. Therefore, Beard as modified by Forson meets claim 5.

Regarding claim 4, applicant argued that Beard returns when there is no exception but not for specifically identified types of exceptions such as a validation exception, and Benson does not disclose continuing processing specifically when an exception is identified as a validation exception. (Remarks, page 10, last paragraph).

The examiner's response is as follows. The argued 'when an exception is identified as a validation exception' is not claimed. Instead, claim 4 requires continuing processing of the computer program if the exception type is a validation exception. This is met by Benson who teaches continuing processing of the computer program by the non-terminating model of exception handling (col. 7, line 62 - col. 9, line 42), and in particular, clearing the trap and return control to the subject program (col. 8, lines 13-35). This occurs if the exception is a validation exception, ie, the exception cause being

Art Unit: 2126

nil, which indicates a valid exception for prog_B (col. 9, lines 29-43). Therefore, Beard as modified by Benson meets claim 4.

For these reasons, applicant's arguments are not persuasive.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (703) 305-9657. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (703) 305 9678. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Sue Lao



August 13, 2004

SUE LAO
PRIMARY EXAMINER